

# PROTON CONDUCTOR

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## Abstract of JP2001155744

**PROBLEM TO BE SOLVED:** To provide an ion conductor that ensures a strong electrolyte layer with high material strength, and stabilizes the ion conductivity electric conductivity for a prolonged time. **SOLUTION:** A material obtained by introducing an acid functional group like sulfonic acid group into an inorganic material such as silica by chemical bonding is combined with a polymer electrolyte material such as perfluorosulphonic group polymer. The inorganic material combined with the acid functional group may be combined with a polymer containing an acid functional group or a polymer not containing such acid functional group. In the latter, the acid functional group of the inorganic material imparts ion conductivity as the electrolyte group.

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